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ABSTRACT

This is one of a series of units for environmental education developed by the Highline Public Schools. The unit has been constructed for use by intermediate grade elementary school pupils. The seven lessons are designed to inform students about the land to develop a land ethic. The unit should be able to be completed in two to three weeks. The fifth lesson is a three hour field trip; the other lessons occur in the classroom and should take from one-half to one hour each. (RH)

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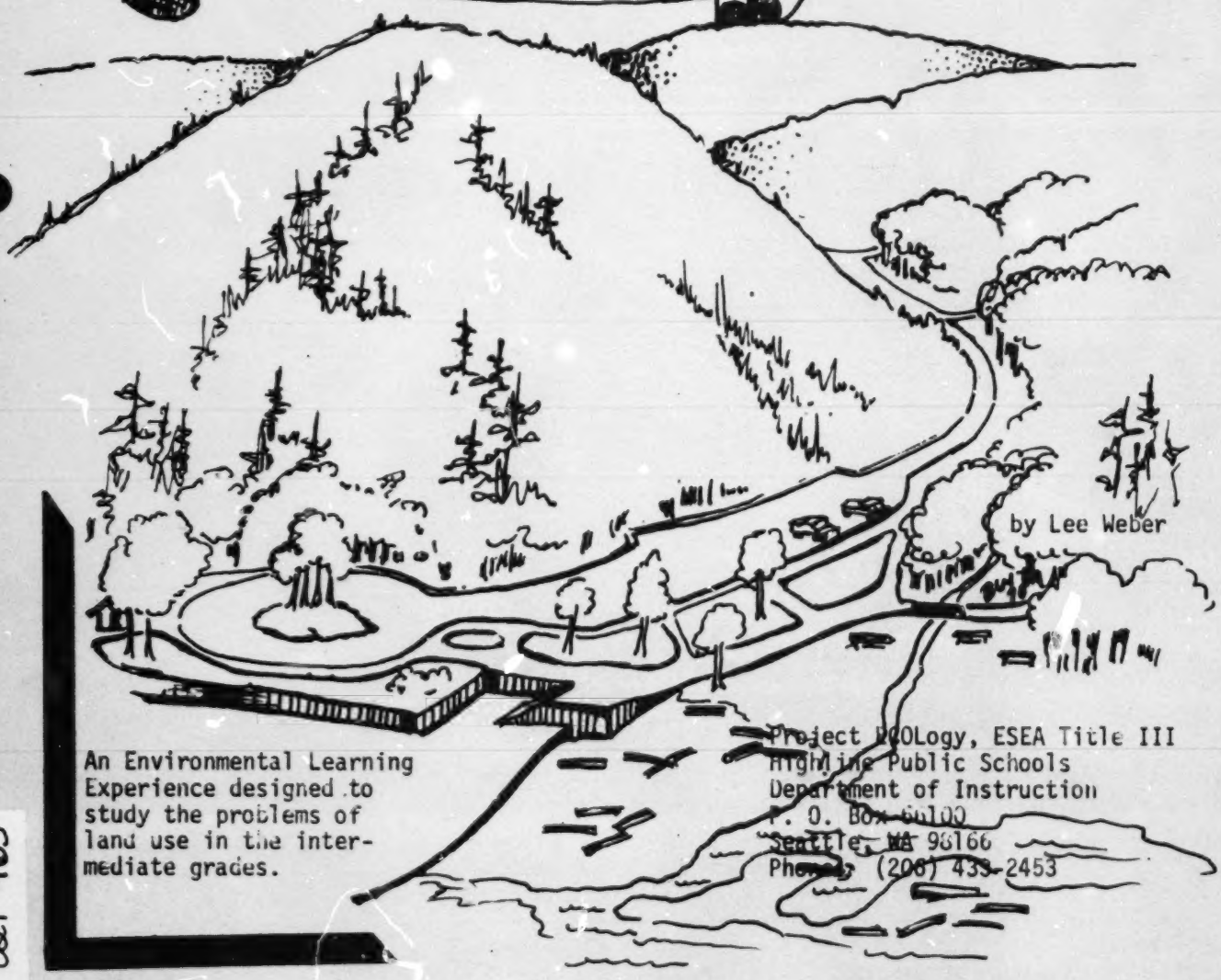
weber pak

This Land Is Your Land



by Lee Weber

An Environmental Learning Experience designed to study the problems of land use in the intermediate grades.

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SE 021 463

NOTES TO THE TEACHER

The seven lessons in this Pak are planned to be used in a 2-3 week time period. The fifth lesson is a 3-hour field trip. The other lessons occur in the classroom and should take between ½ to 1 hour each.

Before the field trip

- o Visit the site yourself in order to have the best control of the situation and to anticipate some of the difficulties or logistics questions that could arise.
- o Have the children join you in deciding on a set of rules and conduct. Try to keep the rules "do" rather than "do not."
- o Find parents who are willing to assume an active role in assisting you with learning activities outdoors.
- o Discuss the purpose of the trip and on-site activities with the students before the day.

During the field trip

- o Involve the group actively as much as possible. Emphasis should be placed on doing. Encourage individual curiosity, investigation and sharing of discoveries with the rest of the group.
- o Make it exciting. Be enthusiastic even over something you have noticed before. Remember, to the group it is new.
- o Maintain a feeling of joint adventure. It is likely the students will call to your attention things that you would ordinarily overlook.

The classroom lessons are designed primarily for an action-oriented model of teaching. The teacher does not serve as a principle source of information. The role of the teacher is to create a learning environment, assist students in acquiring information, provide guidance to the students, and to participate with the student in the learning process.

You may wish for the students to make an environmental folder in which to keep the lesson dittos, field trip data sheets and any extra reports. The contents of the folder can be used as a review as the unit progresses.

CONCEPTUAL OVERVIEW OF THE UNIT

1. The earth is dynamic; the land is constantly changing.
2. The Puget Sound landscape was modified by glaciation in the past.
3. According to the geological time scale, man has only recently appeared on the earth.
4. Land is a basic resource for all living things including man.
5. Concern for the land that generates action is aroused by those subjective feelings we get from an evolving awareness and appreciation of our environs.
6. We need to study the complexities of our natural environment in order to use it wisely.
7. Land-use decisions demand long range planning to meet the needs of successive generations.

BACKGROUND INFORMATION

The essence of this Pak is the development of what the conservationist Aldo Leopold called a "land ethic," that is, a new set of attitudes which would more effectively relate man to the land. An ethic where man is not a conqueror of the land community but a citizen of it. Like other organisms, we are an inseparable part of a system. Unlike other organisms, we have the ability to alter the interrelationships of this system either constructively or destructively.

The urban lifestyle of contemporary man tends to insulate him from a sense of involvement with the land. One of man's essential needs, food production, is increasingly moved further from the urban setting as the once fertile land surrounding our urban areas is converted to industrial and residential uses. Man needs a greater understanding of the natural and man-caused processes which affect the land and subsequently the quality of our existence.

We are now more aware than ever that our environs are partially the result of environmental history and that the key to the future may lie in the perspective provided by studying the rapidity of man-made changes to the land in the context of the slower-occurring natural changes.

Land-use is a controversial issue today; short-term goals vie with long-term goals in determining land use policy. Environmental education must provide the students with skills and knowledge so they can effectively evaluate the future as well as the present implications of land use decisions. Finally, land use policies need to reflect an emerging land ethic where man is a steward of his environment.

MASTER MATERIAL LIST

Kit Materials for 30 Students

One gallon plastic bottle
Ring stand
Beaker or small jar
Lamp
Piece of wire
Soil samples in small plastic bags
    15 samples of topsoil (layer 1)
    15 samples of esperance sand (layer 2)
    15 samples of Lawton clay (layer 3)
Puget Sound Geological History: slides and script
1 camera
30 cardboard portfolios
Ditto masters

Replaceable Items

film for 30-40 prints
60 sheets (8½" x 11") tracing paper
1 cup alcohol
30 yards of medium-weight cord

Films

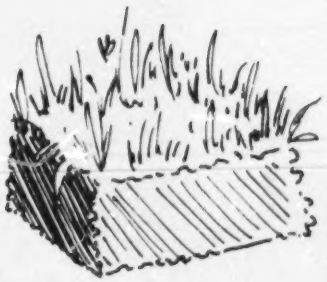
"The Rise and Fall of the Great Lakes," 17 min., color
    Order from the Seattle Public Library (624-3800)
"Seattle Moves a Mountain," 20 min., color (optional)
    Order from the King County Film Library (344-7457)

Other Materials Needed for the Lessons

4" x 4" x 2" piece of moist topsoil
Hard-boiled egg
Slide projector
Film projector
Microscope
Scissors and brads
Crayons and tape

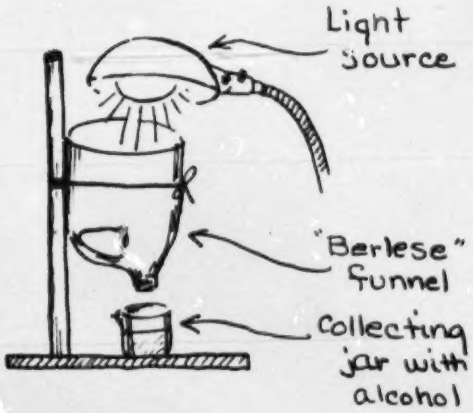
IMPORTANT PRE-UNIT PROJECT
(see Lesson 4)

1. One week before you begin this unit, find a covered area on the school ground and collect a piece of moist topsoil about 4"x4"x2". Leave the grass, leaves, and soil together.



2. Collect the following items from the kit: a one gallon plastic bottle (such as a liquid bleach bottle) with the bottom 3 inches removed, a ring stand, a beaker or a small jar filled with alcohol, a lamp, and some string or wire.

3. Assemble these items as in the diagram at the right. The funnel you have made is called a "Berlese" funnel. Place your sample of dirt in the funnel. As the dirt dries out from the top, the various organisms in the soil will move farther down and eventually drop into the beaker (or collecting jar).



LESSON 1

CONCEPT: The earth is dynamic; the land is constantly changing.

MATERIALS: A hard-boiled egg
Copies of the dittos for each student.

PROCEDURE:

1. *Close your eyes and imagine along with me. Pretend you are an astronaut on a space trip to the moon. As you travel out into space, the most impressive sight of all is not the moon or the nothingness of space but our own planet, Earth. How different it looks to us when viewed from 240,000 miles away. Can you form a mental image of how the earth might look? O.K., open your eyes. What does your mental image of the earth look like?* Discuss the students' images. Several students might draw their images of the earth on the chalkboard.

2. On a hard-boiled egg, roughly sketch the earth's landforms on the shell. *How does the shape of an egg differ from the shape of the earth?* The earth is round; the egg is oval.

   Now peel the shell off the egg. *How are the egg and the earth alike?* The egg's shell is somewhat like the earth's crust. Both are thin, outer layers.

   Scientists call this layer of air, land, and water that surrounds the earth, the biosphere. Write the word on the chalkboard and explain the derivation of biosphere with this simple diagram.

   Why is the biosphere important to us? It is where we live.

3. *A geologist is a scientist who studies the earth's crust. He is curious about the changes that are constantly occurring on the earth's crust since the beginning of the earth. As a geologist discovers information about the land, the information raises yet more unanswered questions. Recently geologists have gathered some exciting information about how the earth's crust is changing.*

   Distribute copies of ditto 1 and 2 to the students. *Study the three maps and see if you can determine the change that is occurring.*

   Help the students formulate questions about the continental drift theory. Examples:

1. How fast are the continents drifting apart?
2. Why are they moving?
3. Are they still moving?
4. How does the movement affect life on the land?
5. What clues do geologists have that suggest the continents are moving?

EVALUATIVE ACTIVITY: Distribute the PLANET EARTH ditto. Have the students draw the picture and fill in the blanks in the sentences.

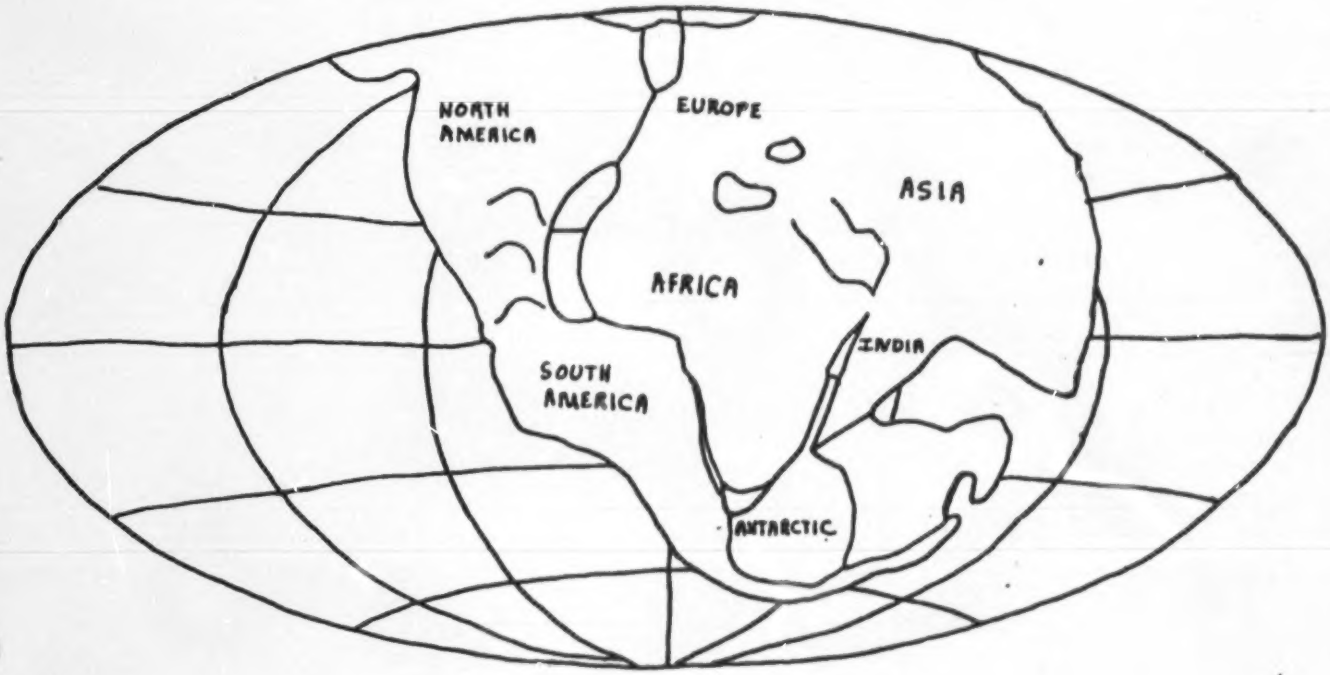
SUGGESTED EXTRA ACTIVITY: Have available some of the following children's books on geology.

Adler, Irving and Ruth. 1963. THE EARTH'S CRUST
Lauber, P. 1962. ALL ABOUT THE PLANET EARTH
Golden, F. 1972. THE MOVING CONTINENTS
Gallant, R. 1960. EXPLORING UNDER THE EARTH
Lauber, P. 1972. EARTHQUAKES: NEW SCIENTIFIC IDEAS ABOUT HOW AND WHY THE EARTH SHAKES

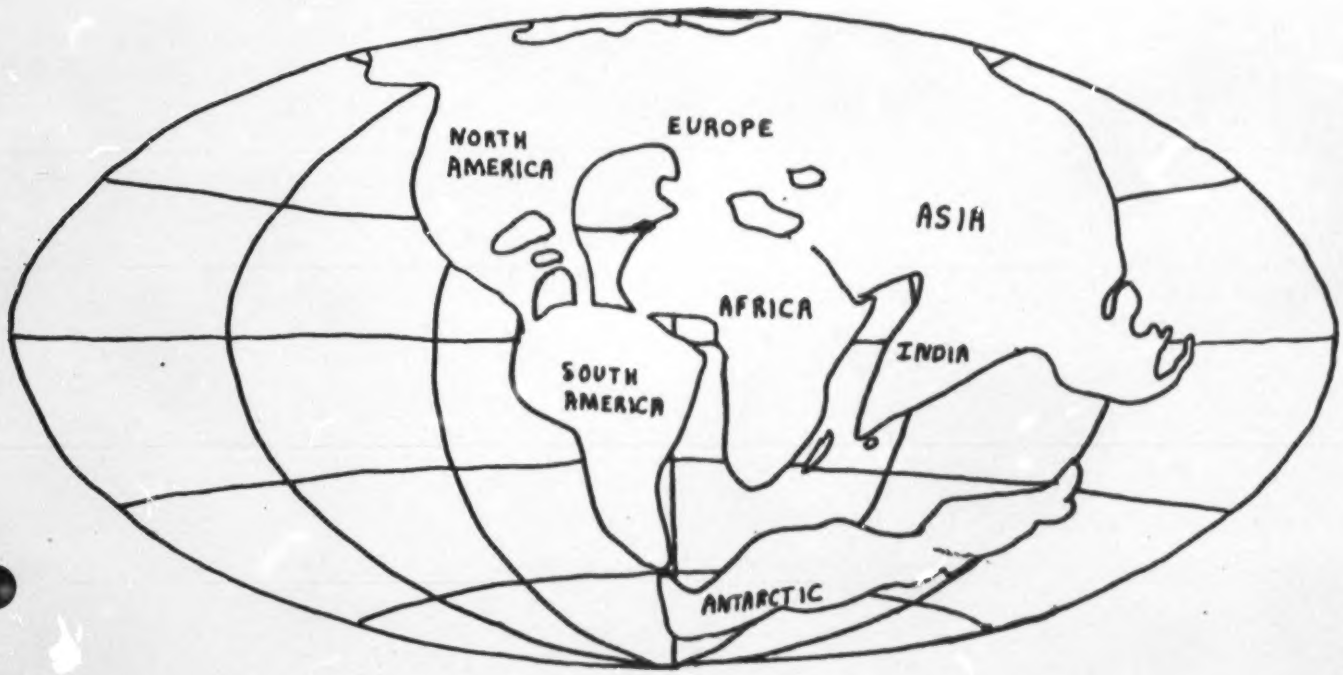
Have the students research some of the questions listed on their ditto. Be sure to provide time for the students to report their findings to the class.

Name_____

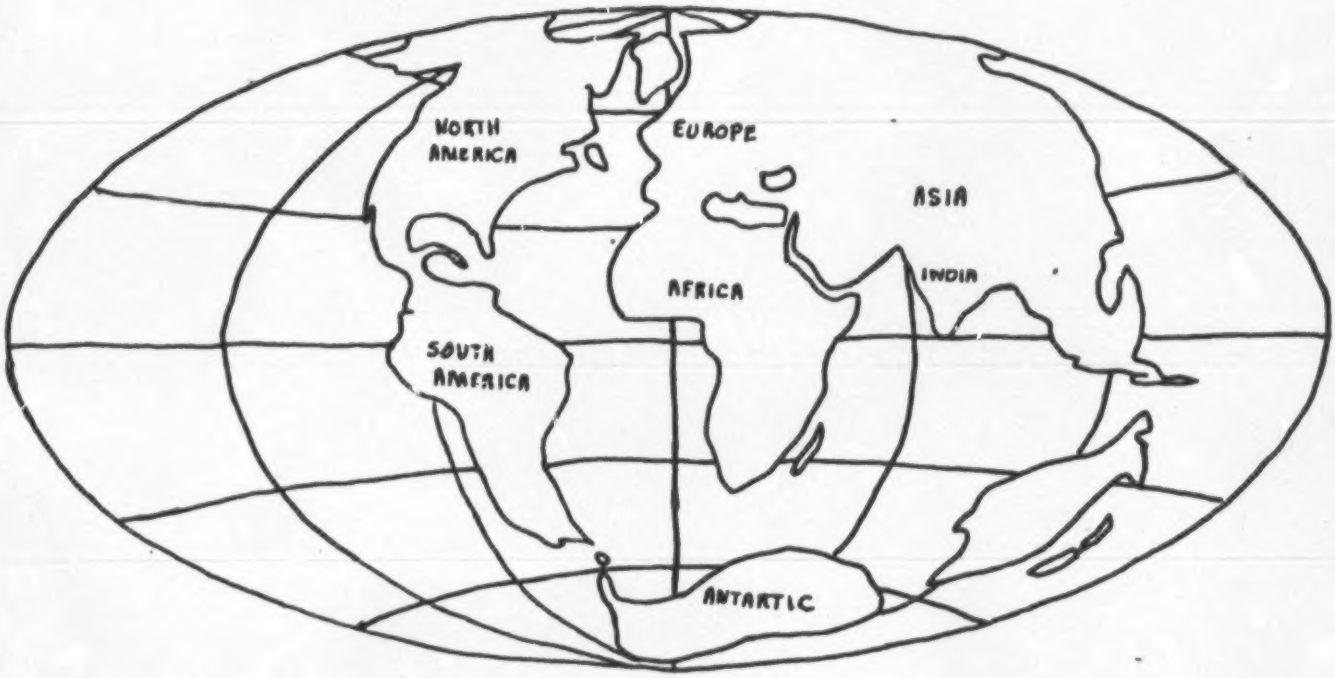
1. Many, many years ago.



2. Still many years ago.



3. Today!



Discovery is open ended. It asks many questions. List your questions on the lines.

Name _____

THE PLANET EARTH

Draw a picture of the earth as it would appear from the moon.

Fill in the blanks.

continents	questions	geologist
round	planet	biosphere

1. Our earth is a _____.
2. Our earth appears _____ from 240,000 miles away.
3. The life layer of the earth is the _____.
4. A _____ studies the earth's crust.
5. We know that the _____ are moving.
6. Discovery leads to more _____.

LESSON 2

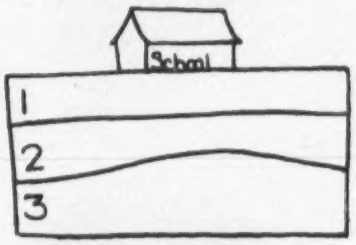
CONCEPT: The Puget Sound landscape was modified by glaciation in the past.

MATERIALS:
Soil samples
Puget Sound geological history; slides and script
Slide projector
Copies of the dittos for each student

PROCEDURE:

1. *Yesterday, we talked about the biosphere, the important life layer of the earth. We viewed the earth from the perspective of an astronaut in space. We tried to look at the entire earth. Do you think the earth's landforms have stayed the same through time? What have geologists discovered about the earth's continents?*

2. *Today we will investigate past changes of the land where we happen to live, the Puget Sound area. One way a geologist studies past changes is to carefully examine the layers of soil found at a particular area. If we could see the layers of soil beneath this classroom, this is what they would look like.* Draw a simple diagram of a soil profile on the chalkboard. *Which layer is the oldest?* (label layer 3, oldest) *Which layer is the youngest?* (label layer 1, youngest)



3. Divide the students into pairs of geologists. Have them examine the three soil samples, (layers 1, 2, and 3) and describe each sample on the SOIL SAMPLE ditto. After the students have had ample time to examine the samples, discuss the characteristics together. *How did you describe layer 1? layer 2? layer 3? Why do the layers differ from one another?*

4. Show the slide presentation of the Puget Sound geological history and read the accompanying script.

EVALUATIVE ACTIVITY: Have the students do the review ditto. They are to label the three pictures correctly and order the sentences in the right time sequence.

SUGGESTED EXTRA ACTIVITY: Create a mural to show past geological changes in the Puget Sound area.

NAME _____

SOIL SAMPLES

COLOR: brown, blue, green, black, gray

FEEL: hard, soft, rough, smooth, sticky, warm, cool, gritty, damp, dry, slick

SMELL: rotten, fresh, old, good

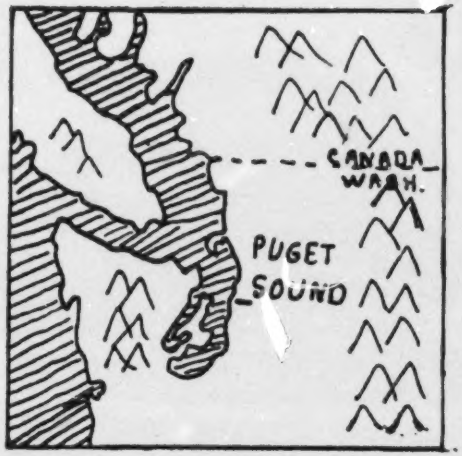
Use some of the words above or make up your own to describe each layer in the soil profile.

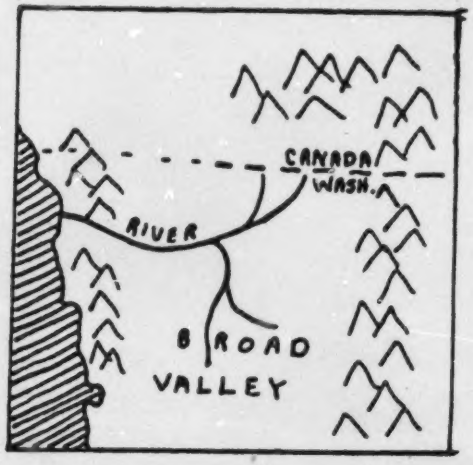
_____

_____

_____

NAME _____





_____ _____ _____

DIRECTIONS: Put the correct label under the proper picture.

BEFORE THE ICE AGE
DURING THE ICE AGE
TODAY

Now, number these sentences according to the correct order.

_____ Many large cities are located along Puget Sound.

_____ The glacier covered the entire Puget Sound area.

_____ A broad valley stretched between the mountains.

_____ As the glacier melted, it left sand, pebbles and rocks.

_____ A glacier from Canada began to move into Washington.

PUGET SOUND GEOLOGICAL HISTORY

Slide	Script
1	The land we see about us is constantly and slowly changing. The nearby wooded bluffs over-looking Puget Sound were not there 14,000 years ago.
2	The saltwater beaches we enjoy today were not part of past landscapes.
3	In fact, Puget Sound did not exist 14,000 years ago.
4	All the landforms that are part of our environment today were formed only recently in geological time.
5	A geologist studies the soil for clues to past events. He asks many questions. Why is the bottom layer so hard and smooth like clay?
6	Why is the middle layer composed of loose sands and pebbles? Do these layers offer clues to what happened in the past?
7	Geologists tell us our land was buried under ice about 14,000 years ago. They refer to this time as the Ice Age.
8	Before the Ice Age, there was a broad valley between the Olympic mountains and the Cascade mountain range. The valley was green in the spring and summer and...
9	brown in the fall and winter. The climate before the Ice Age was similar to our climate today.
10	During the Ice Age, a glacier from the mountains of Canada started to grow. We refer to this glacier as the Fraser glacier.
11	As the ice began to expand into Western Washington, it blocked a large river from flowing into the Pacific Ocean. The trapped water formed an enormous lake. The lake covered the Puget Sound area for hundreds of years.
12	A glacier appears to be a solid but it acts much like a river. It will slowly flow downhill and will spread over a large area. The movement is so slow, you would not be able to see it with your eye.
13	When the Fraser Glacier was the largest, it was 60 miles wide and 3500 feet deep. It completely covered the Puget Sound area.
14	Can you imagine a mound of ice as high as the nearby mountains? How much do you think it weighed? What do you think happened to the soil beneath the tremendous weight of the glacier?
15	A glacier scoops up boulders, rocks, pebbles and sand as it moves along.

16 It acts like a bulldozer as it forces its way forward.

17 The Fraser glacier carried tons and tons of rocks and sand as it moved across Washington.

18 Then as it melted, the rocks and sand were left loosely piled around the Puget Sound area.

19 Now can you answer the questions about the soil? Why is the bottom layer of soil so hard and clay-like?

20 Why is the middle layer of our soil so loose and sandy?

21 How do we know that the land we see today was not the same as before the Ice Age?

LESSON 3

CONCEPT: According to the geological time scale, man has only recently appeared on the earth.

MATERIALS:
Copies of the dittos for each student
Scissors, brads (for fastening the clock hands to the clock face)
Movie projector
Film: "The Rise and Fall of the Great Lakes"

PROCEDURE:

1. Pass out the EARTH CLOCK ditto. Have the children cut out the clock hands and attach to the clock face.

   If each three hours represents one billion years of the earth's existence, how old is the earth? (approximately 4 billion years old) *Move your clock hands to the time you would guess the first animals appeared on the earth. Now guess the time that man first appeared on the earth.* Discuss. Explain that the geologists have studied fossil records and have estimated the following times. Have the students move their clock hands to the respective times and fill in the chart on the second ditto.

10:30	very simple animals
10:45	first fish present
11:20	first reptiles
11:30	first mammals
12:00	man appeared

   Allow a few minutes for the students to fill in the blank space on the ditto.

2. *Why were living things not present earlier in the earth's history?* (The earth's environment was not suitable for life.) *What happened to the large reptiles such as the dinosaurs?* They became extinct as the earth began to cool at the beginning of the Ice Age.

   According to our geological clock, man became part of the earth's environment in very recent times. Do you think man will ever become extinct? This is an open-ended question. Some students might suggest natural environmental changes such as the event of another Ice Age. Others might suggest man-made changes to the environment such as pollution. Encourage divergent opinions and speculations.

3. Show the film, "The Rise and Fall of the Great Lakes." This film is a humorous portrayal of natural and man-made changes to the Great Lakes region. First the glaciers shaped the land and then man is reshaping the land as he used the land to meet his needs.

EVALUATIVE ACTIVITY: Encourage the students to use ideas from the film in their response to the Peanut's cartoon ditto.

SUGGESTED EXTRA ACTIVITY:

Invent some geological math problems. Some examples:

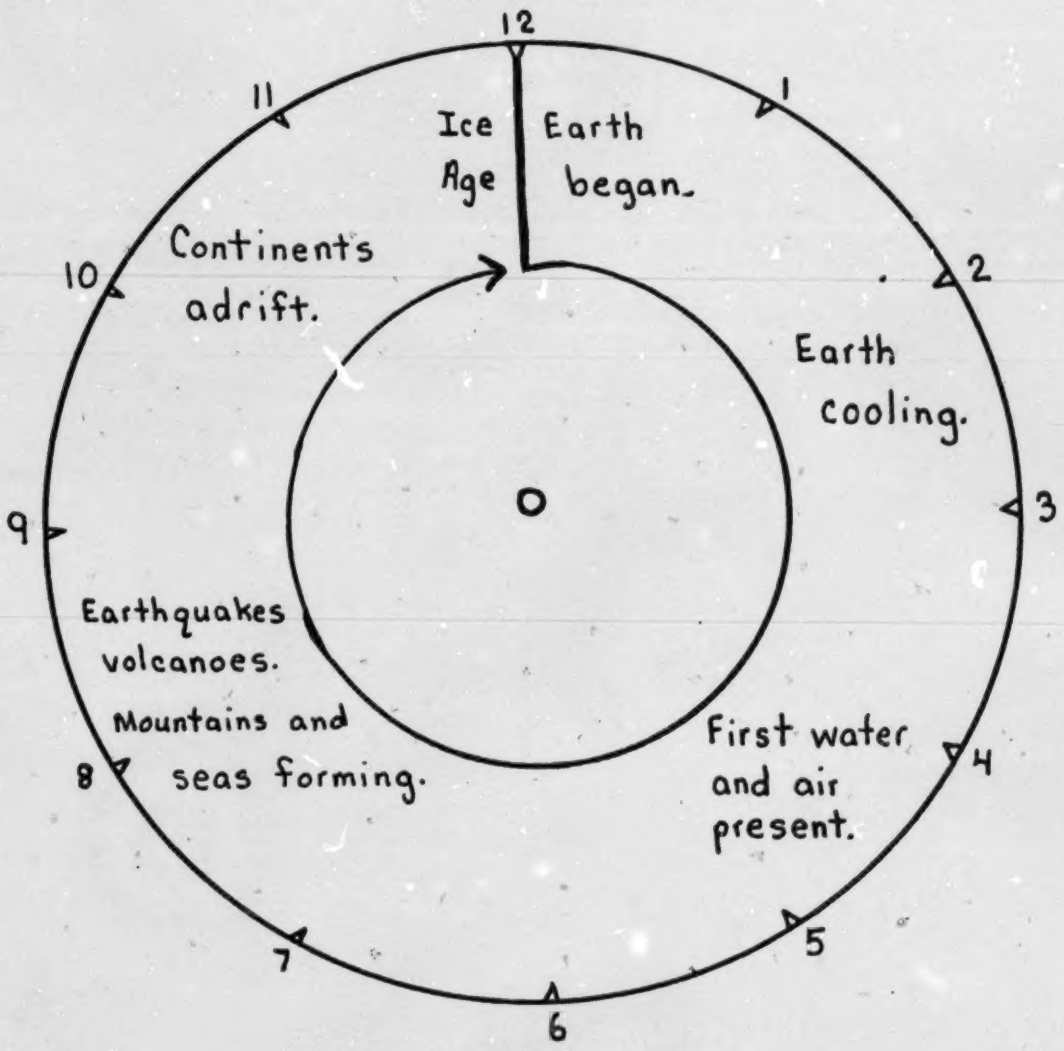
1. The earth is approximately 4 billion years old. According to our earth clock, animals have been part of the earth's environment for _____ billion years.
   ½ 1 2

2. During the Ice Age, a Canadian glacier moved south and eventually covered the Puget Sound region. Geologists estimate the glacier moved 500 feet each year. About how many years would it take the glacier to move the length of this school?

3. Geologists know the continents are drifting apart very slowly. In fact, the geologists estimate that the continents move 3 centimeters each year. One centimeter is about the width of your thumb. Which line is the best estimate of the distance a continent is likely to move in one year?
   A. _____ B. _____ C. _____

Name _____

EARTH CLOCK



Each hour represents one billion years of the earth's existence. The earth is approximately _____ billion years old.

Cut out hands and attach to earth clock.

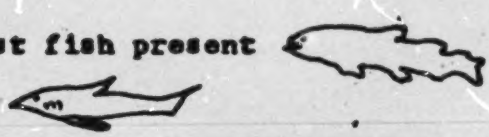
Name_____

EARTH CLOCK TIME

ANIMALS

_____ very simple animals

_____ first fish present



_____ first reptiles

_____ first mammals

_____ man appeared

_____

Please fill in the blank with an animal of the future.

Name _____

Finish this story:

One thing we know for sure, this world is changing because

LESSON 4

CONCEPT: Land is a basic resource for all living things including man.

MATERIALS: Microscope
Copies of the cookie recipe ditto for each student

PROCEDURE:

1. Examine the animals that came from the handful of soil experiment. A microscope would be very useful as many of the animals are very small. Some of the larger organisms that you might find are worms, mites, centipedes, snails, ants and termites. Some of the microscopic organisms might be bacteria, fungi, and protozoa (single celled animals).
   Ask: *How are the animals dependent on the soil?*
   How is the soil dependent on the animals?

2. Distribute the cookie recipe ditto.
   If you were given fifty acres of bare soil, what would you have to plant and what animals would you have to raise before you could bake these cookies? Through this activity, students should become aware of their dependency upon the land.

EVALUATIVE ACTIVITY: Have the students examine the contents of their school desks. Make a list of all the items that at one time needed soil for their existence.

SUGGESTED EXTRA ACTIVITIES:

1. Make the drop cookies with everyone cooperating in the baking process.

2. Soil mobile: Students could construct a mobile which shows the importance of soil for plant, animal and man's use. Materials should be made available for students to use as they wish in accomplishing the objective.

3. Use the poem, "The Soil", in creative dramatics. Assign each verse to a group of five students and allow them to compose appropriate actions to fit the words.

Name _____

Drop Cookies

1 cup butter
2 cups honey
2 eggs
1 3/4 cups flour
1 teaspoon soda
1 teaspoon baking powder
1/2 teaspoon salt
1 teaspoon cinnamon
2 cups rolled oats
1 cup raisins
1/2 cup chopped walnuts

If you were given fifty acres of bare soil, what would you have to plant and what animals would you have to raise before you could bake these cookies?

THE SOIL

I am the soil that lies beneath your feet.
Without me, no heart could ever beat.
To man, to plants, to bird and to beast.
I give life to all--down to the least.

Of all the world's beauty, I'm the fountain;
It flows from me, from valley to mountain.
All blossoms receive their color from me;
Creating beauty for all people to see.

All my elements, makes a world that is green,
Which in bright sunshine has a special sheen.
Sustenance for all creatures I will provide,
So on this earth, they in good health can abide.

When I am left bare, I am apt to stray;
Wind and water will carry me far away.
Without cover, I'll become harsh and hard,
And rushing waters will leave me scarred.

But if a green carpet of plants clothes me,
Then the winds and rain can never harm me,
And when the plants die, to return to the earth;
They'll produce new growth in next spring's rebirth!

Bertil O. Youngquist

LESSON 5

CONCEPT: Concern for the land that generates action is aroused by those subjective feelings we get from an evolving awareness and appreciation of our environs.

MATERIALS:
Copies of the activity dittos for each student
36" cord for each student
Camera and film (optional)
Cardboard portfolio (like a pee-chee) for each student to contain the field trip paraphernalia
Pencils
Large plastic hats if it is raining

LOCATION: This lesson is designed with on-site experiences for the students. Three Puget Sound area parks are especially suitable: Saltwater State Park, Des Moines; Seahurst County Park, Burien; and Discovery Park, Seattle. These parks offer diverse biotic communities and because of their saltwater location, exposed soil profiles along their sea cliffs for geological interpretation. However the activities suggested in the procedure section could be adapted to any outdoor site. Even the school yard or nearby vacant lot could be used.

SUGGESTED TIME ALLOTMENT: About 3 hours.

PROCEDURE:

1. Conduct an Environmental Hunt in which the senses are used. Nothing is collected. Items are checked off on the list only when they have been seen, smelled, touched, or heard. Arrange the students in pairs and have each pair devise their own Environmental Hunt check-list. Exchange lists with another pair and try it again.

2. "Circle of Earth" study: The forest floor can become an interesting area for investigation by the students. To give each pair of students a specific area for investigation, a study circle can be made from a 36 inch piece of cord. The cord should be tied to form a ring. After the student places the ring on the forest floor, he can examine the materials and animal life contained in the ring. Have the students record the information by drawing or listing the objects on the ditto.

   Repeat the circle activity on the beach. The rock bulkheads, driftwood, the rocky upper-tidal zone, and the lower-tidal zone (if the tide is low) offer interesting study sites.

3. "You are the Ecologist": Choose a specific area or length of trail. Assign each pair of students to a point in that area and allow each enough time to formulate a question about something they observe. The questions should not ask for names or yes or no answers. Rather they should be designed to encourage thinking and discussion. An answer need not be given or known. If a camera is available, photograph each site the students have selected as a basis for their questions. The photos and/or sketches with their student-derived questions will be used in the classroom.

NAME _____

ENVIRONMENTAL HUNT CHECK LIST

THINGS TO SEE

- ☐ A seagull
- ☐ A tree trunk that looks like a face
- ☐ A tree growing on a stump
- ☐ A cloud moving
- ☐ A woodpecker hotel
- ☐ A cacoon
- ☐ The burrow of an animal
- ☐ Exposed soil layers
- ☐ A tree with a curved trunk on a steep slope

THINGS TO HEAR

- ☐ An insect buzzing
- ☐ Dry leaves under your feet
- ☐ Trees in the wind
- ☐ A friendly sound
- ☐ Waves on the beach
- ☐ A warning sound

THINGS TO SMELL

- ☐ A muddy spot
- ☐ Inside a hollow log
- ☐ A blossom
- ☐ A piece of driftwood
- ☐ Some seaweed
- ☐ A decomposing log

THINGS TO FEEL

- ☐ Rotten wood
- ☐ Wet mud
- ☐ Bark of two different trees
- ☐ Loose sandy soil
- ☐ Something prickly
- ☐ Shade
- ☐ Something slippery
- ☐ A smooth surface
- ☐ Soil beneath a tall tree

THINGS HAPPENING

- ☐ An ant carrying something
- ☐ A mushroom growing on a log
- ☐ A seed traveling
- ☐ A spider web with a bug in it
- ☐ An animal eating
- ☐ Water moving
- ☐ Something changing

NAMES _____

YOUR ENVIRONMENTAL HUNT CHECK LIST

THINGS TO SEE

☐ _____

☐ _____

THINGS TO HEAR

☐ _____

☐ _____

THINGS TO SMELL

☐ _____

☐ _____

THINGS TO FEEL

☐ _____

☐ _____

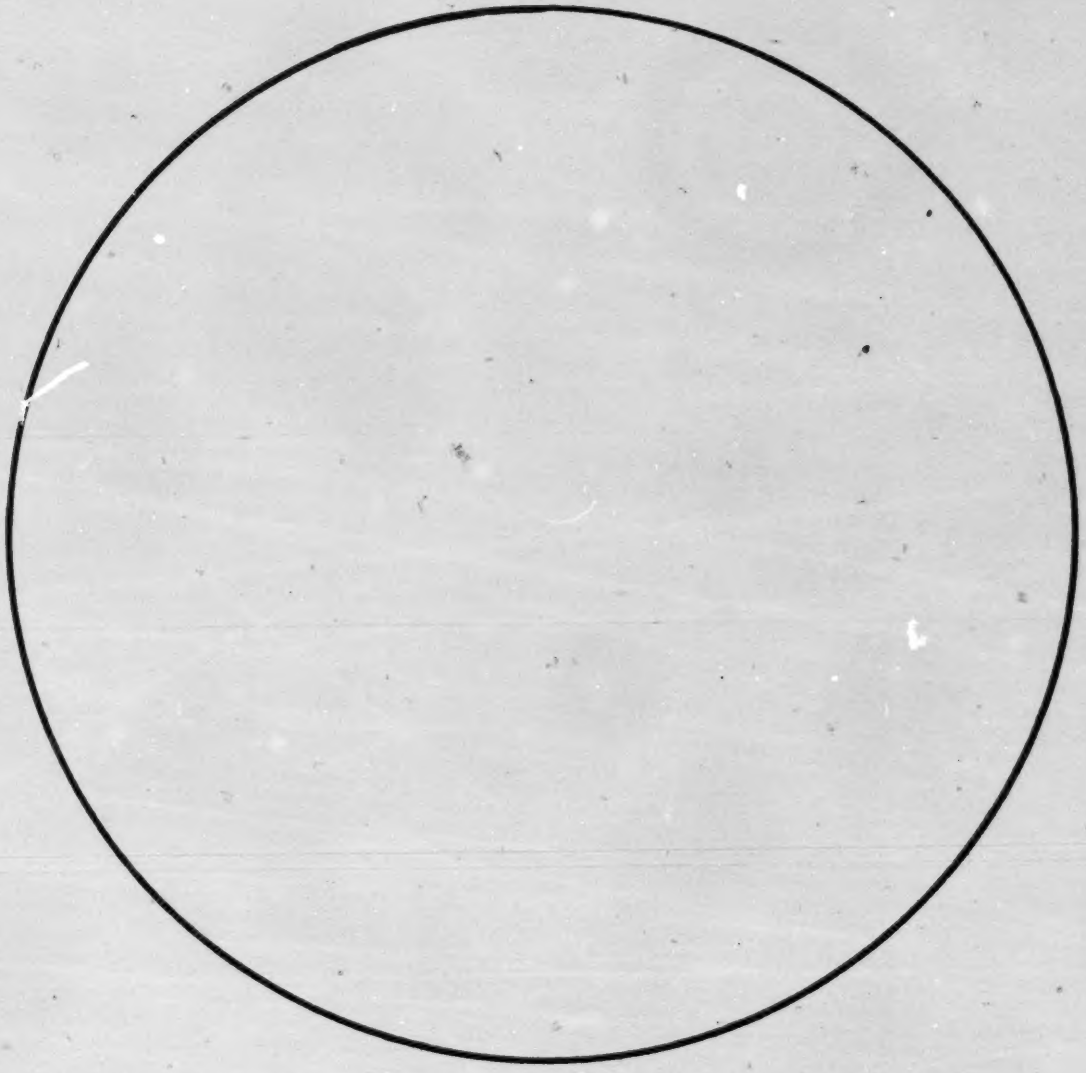
THINGS HAPPENING

☐ _____

☐ _____

NAME _____

CIRCLE OF EARTH STUDY



Draw and list the things found in the circle.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

LESSON 6

CONCEPT: We need to study the complexities of our natural environment in order to use it wisely.

MATERIALS: Circle of Earth data sheets
Site photographs

PROCEDURE:

1. Circle of Earth study: Have the students examine the circle study data from the forest floor site.

   Divide your list of things into two groups; living and non-living. Discuss the items in each group. *Draw a circle around the things in your living group that are dependent on something in your non-living group. What would happen if we removed all the non-living parts such as the small branches, evergreen needles, and deciduous leaves from the circle?* Discuss the interdependence of the living and non-living parts of the circle.

2. Use the site photographs and questions from the "You are the Ecologist" activity to stimulate a discussion on the complexities of the interactions in our natural environment. An important assumption for this discussion is that the ability to ask questions about one's environment is more important than knowing the correct answer. Hopefully, the students' questions and accompanying site photos will provide the impetus for such a discussion.

EVALUATIVE ACTIVITY: Have the students write an appreciation letter to the park department as a group activity. In the letter, the students might suggest ways in which they can use a park and still preserve the natural environment for future generations to enjoy.

SUGGESTED EXTRA ACTIVITY: Have the students write a cinquain. *From all the things you saw on the field trip, pick out your favorite thing...*
Use one word to name what it is.
Can you use two words to describe it?
Three words about what it is doing?
Four words to describe how you feel about it?
One word, which, to you, means the same as the first word?
For example:

stream

rippling water

leveling the land

fun to play in

creek

Your favorite thing:

_____

_____ _____

_____ _____ _____

_____ _____ _____ _____

_____

You just wrote a poem called cinquain (sin-kane) about your favorite thing which you saw on the field trip.

LESSON 7

CONCEPT: Land-use decisions demand long-range planning to meet the needs of successive generations.

MATERIALS: A copy of the dittos for each student
Tracing paper
Crayons and tape

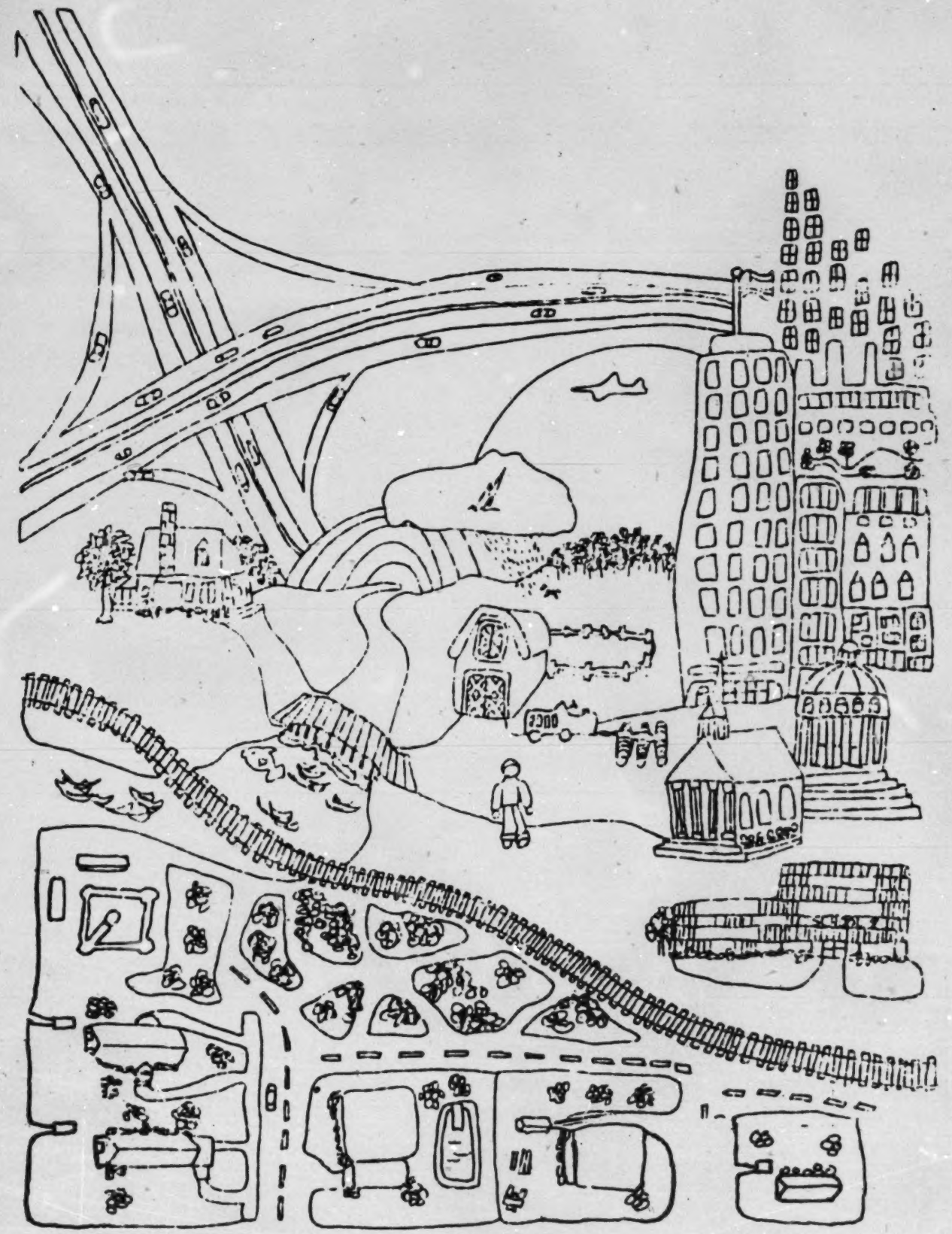
PROCEDURE: Using the urban scene on the ditto or pictures from magazines, have the students predict how the area in the picture looked some time in the past and how it will look some time in the future. Furnish each student with a copy of the ditto and two sheets of tracing paper. Have the students fasten the first sheet of tracing paper over the picture with tape and draw a picture to indicate how the area looked some time in the past. Label the first drawing, "Past". Then have the students fasten the second sheet of tracing paper over the picture and indicate the way the area will look in the future. Label the second drawing, "Future". *Let's compare your Future picture with your Past picture. Which picture has more green spaces such as farm land, forests or open spaces? Why? Which picture has more highways, stores, and houses? Why? What happened to the farm land and forests as the urban area expanded? How can we save the farm lands and forests for the future?*

EVALUATIVE ACTIVITY: Discuss the land-use dilemmas described in the Animal Cracker cartoon and the child's letter on the second ditto.

SUGGESTED EXTRA ACTIVITIES:

1. Plan a bulletin board display of newspaper articles on land-use decisions, issues, and pending legislation.

2. Show the film, "Seattle Moves A Mountain." The engineering department of the city recently made this interesting documentary of the removal of Denny Hill. The hill impeded the development of the business district so through an elaborate system of earth-moving machinery, conveyer belts, and barges, the land was moved from Denny Hill and dumped into Elliott Bay. Old film clips are effectively used to portray this man-made change to the land. The film is available free through the King County Film Library (344-7457). Order in advance, the film is popular. The library will mail the film directly to your school for your use.



Name_____

LAND-USE CONFLICTS

ANIMAL CRACKER
LYLE, DID YOU HEAR THEY'RE GOING TO FILL IN THE LAKE -
-AND BULLDOZE 200 THOUSAND TREES AND LEVEL THOSE HILLSIDES?
BUT, WHY?
-THEY'RE PUTTING IN AN EIGHT-LANE SUPER HIGHWAY.
WHAT FOR?
-THEY SAY THAT IT WILL ENABLE MORE PEOPLE TO GET OUT AND ENJOY THE ECOLOGY.

Dear Mr. President
we Have no Place
to go when we
want to go out
in the canyon
Because there
ar going to Build
houses So could you
Set aside some
land where we could
Play ? thank you four listing
love SCOTT